# Pest Update (Aug 22-29, 2012)

**Vol. 10, no. 24**

**John Ball, Forest Health Specialist SD Department of Agriculture,**
**Extension Forester SD Cooperative Extension**

Email: john.ball@sdstate.edu
Phone: 605-688-4737
Samples sent to: John Ball
Plant Science Department
rm 230, Agriculture Hall, Box 2207A
South Dakota State University
Brookings, SD 57007-0996

Note: samples containing living tissue may only be accepted from South Dakota. Please do not send samples of dying plants or insects from other states. If you live outside of South Dakota and have a question, instead please send a digital picture of the pest or problem. **Walnut samples may not be sent in from any location – please provide a picture!**

**Available on the net at:**
http://sdda.sd.gov/Forestry/Educational-Information/PestAlert-Archives.aspx



**In this issue** **pg**

## Current concerns

**Emerald ash borer on the move again.** This time the insect has been confirmed in an ash tree in Wyandotte County, Kansas – a new state to add to the list of states and provinces with known infestations of the beetle. The tree was discovered during a survey for the beetle, conducted in part due to the nearby discovery in Platte County, Missouri in July.

Emerald ash borer was accidently introduced into Michigan from East Asia sometime during the 1990s and went undetected for almost a decade, Once the new insect was discovered – surprisingly the large scale die off of ash in the Detroit area was originally misidentified – it was too late to eliminate the insect. Now, primarily through infested firewood, the insect has spread from Connecticut to Kansas. While the spread has slowed in recent years due to the efforts at preventing the movement of ash firewood, it is still probably only a matter of time before the borer is found in South Dakota. Once the insect does reach South Dakota it will have plenty of food as ash is one of most common tree species in communities and tree belts. Ash is also a native tree and can be found growing also the state's rivers and lakes.

At this time the South Dakota Department of Agriculture and South Dakota Cooperative Extension are NOT recommending tree owners begin treating their ash with pesticides as a preventative measure. Preventative treatments are not advised until the insect has been confirmed within 15 miles of your trees. Since the nearest known infestation is in the Minneapolis-St Paul area, about 200 miles from South Dakota there is no need to begin treatments. The best thing to do at this time is to plant trees other than ash to increase the diversity of tree plantings around the state and reduce the future impact of the borer when it eventually reaches South Dakota.

**Mountain pine beetle update.** We are now beyond the peak of the adult emergence from their dead hosts but there will still beetles attacking trees into September. This is one reason the Department of Agriculture foresters and their crews do not begin marking the newly infested trees for removal or treatment until October 1. If you start marking too early, you'll just have to go back and mark again as

new attacks will continue to occur.

You can recognize the new attacks, not by changes in the canopy of the tree – the needles will not turn color on infested tree till next spring or summer – but by the appearance of pitch globs. Ponderosa pine trees defend themselves from attacks by producing resin to “pitch” adult beetles out as they try to burrow in. You can sometimes find “pitch outs” unsuccessful attacks, with the beetle still stuck in the whitish glob of resin. However, in the vast majority of attacks, the lower 15 to 35 feet of the tree is covered with dozens of reddish-brown pitch masses extending around the trunk, evidence of the beetles success in tunneling into the inner bark of the tree. You might also find reddish-brown boring dust in the bark crevices and surrounding the base of the tree. This dust is created as the beetles bore through the bark and into the tree.

Once the beetles have entered the inner bark, they mate; the female lays eggs along the side of the gallery created by the tunneling adults. At this time if you peel the bark off a successfully attacked tree, you probably find tunnels several inches long or more carved into the inner bark and usually running parallel to the grain of the wood. . The eggs, invisible to the naked eye, will begin to hatch soon and tiny white, legless larvae will start tunneling perpendicular to the parent gallery. This tunneling by the larvae and the adults will girdle the tree and kill it with a year. The insects are aided in this effort by blue-stain fungi that they carry with them to their new host. The fungi provide some nourishment to the developing larvae and also injure the tree resulting in a more rapid death than might occur from the beetle activity alone.

**Mountain pine beetle workshops**

Once the attacks are completed and the infested trees are identified, work can commence on felling and treating these hosts as a means of reducing the beetle population and spread in 2013. There will be a series of workshops to help landowners identify the newly infested trees and separate these attacks from those made by the mountain pine beetle cousins, the pine engraver beetle and the turpentine beetle, as well as the treatments that can done on infested trees. The workshop schedule is:

| | |
|---|---|
| September 6: 6-8 pm | Outdoor Campus, 4130 Adventure Trail, Rapid City |
| September 7: 6-8 pm | Hill City High School Theater, Hill City |
| September 8: 9-11am | Crazy Horse Memorial |
| September 8: 3-5 pm | Brownsville Fire Hall, Nemo |

All presentations are free and open to the public.

**Apple harvest is beginning in many areas of the state** so it's a good time to review how to pick apples. First, apples do not continue to ripen once picked, they are at their peak of color and flavor when you take them from the tree. Do not pick apples too early but how can you tell? The first indicator the apple is ripe is the color. The apple should be having the normal coloration for the particular cultivar without pale or yellowish patches. Next, if the color is right, the fruit should come easily off the branch. If you have to *pull* the fruit from the tree – it's too early. If the apple is ripe, you do not need to pull it off the tree, merely place the palm of your hand beneath the fruit and roll up the apple with a slight twist. The apple should snap off with little additional pressure. Once you picked the apple, place it in the bag, don't throw it, otherwise it may bruise. Place it in a cool spot at home – root cellars are perfect, but rare to find in modern homes so the refrigerator will do. Just don't wash the fruit until you are ready to eat it, they last longer that way.

**Trees are beginning to drop leaves (and even twigs)**. Premature autumn coloration – yellows and reds – as well as leaf drop is beginning to occur on trees throughout the state. We are even seeing cottonwood beginning to drop their twigs. The reason is most likely the extreme drought stress on these trees as trees in irrigated lawns are not expressing the same symptoms. There is not much that can be done for these defoliating trees except water, water, water. Even if the tree has dropped most of its leaves, it will still be transpiring water and this water much be replaced. Continue to water your trees during the month of September.

**And this is just peachy!** I have been getting lots of reports – even from Aberdeen of a bumper crop of peaches this year. While the winter was too warm and dry for many trees, it appears that the winter and spring conditions were just right for peaches. This stone fruit is better adapted to regions with warmer winters than we normally experience and the lack of a frost during flowering meant a good crop. The most

common peach I have received reports on is Contender and many folks are harvests several bushels of fruit from their trees this year.

## E-samples

**Elm leaves are beginning to fall and it is not always due to Dutch elm disease**. The reason may be black spot, one of the most common diseases of elm before Dutch elm disease entered the country. The disease caused by the fungus *Stegophora ulmea* is not fatal to the tree but can result in significant defoliation by mid to late summer. Infected leaves develop black lesions throughout the leaf blade; the leaf turns yellow and then falls prematurely. The disease is not too common this year since it takes cool, moist spring weather to really get an infection started, but the disease is still showing up. Black spot overwinters in the fallen leaves and in the buds so raking and disposing of the fallen leaves usually does not significantly reduce the disease.

**Walnut anthracnose, a very common fungus disease of black walnut is beginning to appear**. As with other anthracnose disease, the tree becomes infected in the spring as the tender new leaves emerge in the cool, moist spring environment, but the symptoms – yellowing leaves with black spots that drop prematurely – do not occur until now. The disease overwinters in the twigs and fallen leaves (one reason an infected tree only has leaves remaining at the tips is the spores "rain" down from the twigs and these are usually above the "rain." The disease is not harmful to the tree and now is *not* the time for control.

**One of the most common shrub identification questions during August is about hedge cotoneaster (*Cotoneaster lucidus*)**. This is a common hedge and ornamental shrub through the state and every late summer I receive calls and picture about what is this shrub and are the "berries" edible. The fruit is considered "edible" but tough, powdery and sour, no one would really want to east more than a few – like eating Styrofoam. They are considered poisonous in large quantities, though no one defines just what large is so best to leave the fruit to the birds (who apparently do not have taste buds!)

## Samples received

Campbell County **This is a branch from a dying spruce. It was planted last fall.**

This is a Colorado spruce (blue spruce, *Picea pungens*) and it is not a drought tolerant as most people believe. We are seeing lots of declining spruce this year due to the hot, dry conditions. We did not have much rain last autumn and the winter was unusually warm and dry – the perfect combination to kill newly planted conifers. There were no signs or symptoms on the sample twigs or needles to indicate any insect or disease problem, but this year's shoot growth and needles were extremely short. This looks like drought injury and I doubt the trees will survive if they look anything like this sample.

Pennington County **Is this oystershell scale on this aspen?**

Yes, oystershell scale is a common problem on aspens out in the Black Hills. Some oystershell scales are almost a light color (the lilac oystershell scale) while others, such as those in this sample are a dark brown (the brown or apple oystershell scale). The scales overwinter in the egg stage and I was already able to find eggs beneath the adult scales. Control, of course, is in the spring, usually May, after the eggs hatch and the crawlers are active.

Pennington County **I found these strange growths on the branches of a cottonwood. What are they?**

This is a gall of the poplar vagabond aphid. The galls occur on the shoot tips and start out as green but begin to dry at this time of year and turn almost a black before winter. The galls will persist for several years. The aphid overwinters as an egg but hatches in the spring and begins to feed on the new shoots. The feeding results in the twisted and hollow galls. The treatment for this pest is usually a soil drench of a systemic insecticide applied in the autumn.

Turner County **These are oaks that are showing some spotting on the leaves but otherwise look good. What might be the problem?**

This is a leaf gall caused by a small cynipid wasp. While the galls look unsightly they do not harm the tree in anyway. There are no treatments since the life cycles are not well known, nor are any necessary. These galls seem to occur in a cyclical pattern. He might see them for several years in a row and not again for another five to eight.

Turner County. **This is a dogwood sample. What might be the problem?**

We see a problem on red-osier dogwoods during this dry summer. While I did not receive a long enough cane to verify the problem, the marginal browning, drying, of the leaves is most likely is due to a fungus disease known as botryosphaeria canker. The fungus disease causes cankers along the stems of

the shrubs and the restricted water movement results in leaf blight. The disease is a weak pathogen and the best treatment is to water the plants during the dry summer months. The other treatment is to prune the shrub to within 3 inches of the ground during the winter and the suckers that come up the following spring are usually disease-free.

Union County **This is a spruce tree that has the lower branches declining and some of the interior needles dropping.**

The problem here is cytospora canker, a very common disease of spruce, particular Colorado spruce. The lower branches of an infected tree will begin to decline and die and evidence of the disease is often present as bluish-white resin blisters on the affected branches (and contained in the long sample). There is nothing that can be done about the disease other than keep the tree healthy by watering and pruning off the branches as they die.